

## **REMARKS AND DISCUSSION:**

Upon entry of the present Amendment-A, claims 1-19 are pending in the application, of which claims 1, 7, 11 and 16 are each independent. Claim 19 is being added by the present Amendment-A.

The above-identified Office Action has been reviewed, the references carefully considered, and the Examiner's comments carefully weighed. In view thereof, the present Amendment-A is submitted.

It is contended that by the present Amendment-A, all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of all rejections of record is respectfully requested.

### **Amendments Presented**

***In the Claims:*** Claims 1, 11 and 16 have each been amended herein to more clearly define that the pulley support member comprises a first arm part disposed on a first side of the pulley, a second arm part disposed on a second side of the pulley, a spring-containing part operatively attached to the second arm part, and a pulley axle which extends through the first arm part, the second arm part, the pulley and the spring-containing part.

Claims 1 and 16 have also been further amended to specify that the first extending part is integrally formed with the first arm part of the pulley support member, and the second extending part is integrally formed with the spring-containing part.

Claims 2 and 5 have been amended for consistency with the amendments to claim 1.

Claim 6 has been amended for idiomatic reasons.

Claim 7 has been amended herein to specify that the engagement recovery-guiding parts are configured to be substantially symmetrical to one another as seen in cross-section, and to diverge outwardly away from one another at a distal end of the arm.

Claim 8 has been amended to correct a minor editorial error and for idiomatic reasons.

Claim 12 has been amended for consistency with the amendments to claim 11.

Claim 14 has been amended for idiomatic reasons.

New claim 19 further defines the gear-shifting apparatus of claim 11, wherein the engagement recovery-guiding parts are configured to be substantially symmetrical to one another as seen in cross-section, and to diverge outwardly away from one another at a distal end of the arm.

Applicant respectfully submits that the above amendments to claims, including new claims, are fully supported by the original disclosure, including the drawings. Applicant also respectfully submits that no new matter is introduced into the application by amending the claims and specification, and by adding new claims because since the entire subject matter thereof was expressly or inherently disclosed in the original claims, specification and drawings.

#### Restriction Requirement

Applicant acknowledges that in item 1 on page 2 of the Office Action, the Examiner has withdrawn the previously imposed Restriction Requirement. Applicant thanks the Examiner for withdrawing the Restriction Requirement.

#### Claim Rejections – 35 USC §103

In the Office Action (page 3, item 4), the Examiner rejected claims 1-18 under 35 USC 103(a) as unpatentable over Matsumoto et al. (EP 1418120, the disclosure of which corresponds to published US application 2004/0130120) in view of Huret et al. (US 4,058,020). The Examiner has taken the position that in the Examiner's view, it would have been obvious to modify the gear-shifting apparatus of Matsumoto with the engagement recovery chain-guiding structure of Huret.

Applicant's Response:

As stated above, applicant has amended independent claims 1, 7, 11 and 16, herein. Upon careful consideration of the Examiner's rejection, the applied references and in light of the above amendments to claims 1, 7, 11 and 16, applicant respectfully traverses such rejection and submits that the rejection is overcome because the references, whether considered singly or in combination thereof, fail to teach or suggest all of the required features of the claims.

**The Standard for Rejection under 35 USC 103**

In order to determine obviousness as a legal matter, four factual inquiries must be made concerning: 1) the scope and content of the prior art; 2) the level of ordinary skill in the art; 3) the differences between the claimed invention and the prior art; and 4) secondary considerations of nonobviousness, which in case law is often said to include commercial success, long-felt but unresolved need, failure of others, copying, and unexpected results. *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459, 467 (US 1966); *Miles Labs v. Shandon*, 997 F.2d 870, 27 USPQ2d 1123, (Fed. Cir. 1993).

The U.S. Supreme Court has recently said that “[A] patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art. . . . Inventions usually rely upon building blocks long since uncovered, and claimed discoveries almost necessarily will be combinations of what, in some sense, is already known. *KSR v. Teleflex*, 127 S. Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (S.Ct.2007).

In view of the recent Supreme Court decision in *KSR v. Teleflex, supra*, the Patent Office has published examination guidelines for determining obviousness under 35 U.S.C. 103 (see Federal Register V. 72, No. 195, October 10, 2007). Applicant respectfully suggests that under the Patent Office guidelines, the Examiner must provide a convincing reason why he or she feels that it would

be obvious to combine the elements of the cited references in the fashion claimed by applicant. “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (*In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) cited with approval in *KSR v. Teleflex, supra.*)

The U.S. Supreme Court has also stated that a factfinder should be aware of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning. See *Graham*, 383 U. S., at 36 (warning against a “temptation to read into the prior art the teachings of the invention in issue” and instructing courts to “guard against slipping into the use of hindsight”. *KSR v. Teleflex, supra.*

Applicant respectfully submits that even if the applied references are hypothetically combined, for the sake of argument, the combination fails to produce applicant’s invention as claimed.

Applicant respectfully submits that the differences between the claimed invention and the cited references are substantial and significant, and therefore, applicant’s invention is non-obvious as compared to the respective teachings of the references.

For example, applicant submits that neither Matsumoto, Huret, nor any reasonable combination of these two references teaches, discloses or suggests applicant’s gear-shifting apparatus, as currently claimed, nor do these references render applicant’s invention obvious.

Applicant respectfully notes that Matsumoto fails to disclose the engagement recovery parts as currently set forth in applicant’s claims. Moreover, while Huret teaches a chain-guiding structure, Huret’s pivot axle 5, provided for supporting the chain guide pulley 3, is attached to only a single one (1) of the side plates 1, 2. Huret also fails to teach engagement recovery-guiding parts configured to

be substantially symmetrical to one another as seen in cross-section, and to diverge outwardly away from one another at a distal end of the arm, as claimed in claims 7-10 and 19.

For all of the foregoing reasons, applicant respectfully submits that the rejection of claims 1-18 has been overcome, and it is respectfully requested that such rejection be reconsidered and withdrawn.

#### Other Matters

The additional references cited by the Examiner on the form PTO-892 included with the Office Action – US Patents: 5,873,590 to Abe, 6,419,602 to Soon and US Published Applications: US 2005/0176537 to Matsumoto et al. and US 2004/0014543 to Van Der Linde – have been considered by applicant. However, applicant respectfully submits that each of claims 1-19 distinguishes over these references, considered either singly or in combination for the reasons discussed above.

#### Conclusion

Based on all of the foregoing, applicant respectfully submits that all of the rejections set forth in the Office Action have been overcome, and, as presently amended, all of the pending claims are believed to be allowable over all of the references of record, whether considered singly or in combination.

It is applicant's contention that no possible reading of the references, either singly or in any reasonable combination, can be viewed as teaching applicant's claimed invention. Therefore, applicant respectfully requests reconsideration and withdrawal all of the rejections of record, and allowance of the pending claims.

If the Examiner is not fully convinced of the allowability of all of the claims now in the application, applicant respectfully requests that the Examiner telephonically contact applicant's undersigned representative to expeditiously resolve prosecution of the application.

Favorable consideration is respectfully requested.

Respectfully submitted,



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